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To: Camp Directors
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From: Susan M. Lett, M.D., M.P.H., Medical Director, Immunization Program,
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Re: 1) Mumps Outbreaks
2) Immunization Requirements for Recreational Camps for Children
3) Reporting of Suspect Mumps Cases and Control Measures

Date: May 2010

In light of the recent mumps outbreak in the northeastern United States, the Massachusetts Department of Public Health (MDPH) would like to remind you of the existing immunization requirements for campers and staff related to mumps, and review the reporting of suspect mumps cases and control measures.

Mumps Outbreaks

The Northeast has been experiencing a large outbreak of mumps that began in the summer of 2009 at a summer camp in New York. The outbreak has primarily affected the Orthodox Jewish community in New York and New Jersey. There have been over 3,000 cases, some occurring in New England and Canada. Although little transmission has occurred so far outside the initial community, mumps can spread rapidly in congregate settings such as schools and colleges. Camps should have a heightened awareness of mumps and ensure that campers and staff are appropriately vaccinated.

In 2008, seven confirmed cases of mumps were reported in Massachusetts; six cases were among individuals from outside the US. Many of these cases had no documentation of MMR vaccination or only had one dose. In 2009, there were 14 confirmed cases; nine cases were associated with a college campus outbreak. So far this year, there have been four confirmed cases of mumps in the state; three are associated with the NY/NJ outbreak. In addition, mumps remains common in many parts of the world, including in Western Europe. Therefore, spread within the US from the domestic outbreak, as well as from international travel, is still possible, especially for camps.

Although mumps vaccination alone was not sufficient to prevent the current outbreak, maintaining high two-dose coverage of measles, mumps, and rubella (MMR) vaccination remains the most effective way to prevent and limit outbreaks when they occur. Mumps vaccine effectiveness has been estimated at 73-91% for one dose, and 76-95% for two doses.

Mumps Vaccine Requirements

1. Campers and Staff <18 years of age

Campers and staff <18 years of age are **required** to have 1 dose of mumps, 1 dose of rubella and 2 doses of a measles-containing vaccine, unless they have laboratory evidence of immunity (105 CMR 430.152 A).

Since the MDPH Immunization Program only supplies the combination measles, mumps and rubella (MMR) vaccine, campers or staff who have attended school or college in Massachusetts, and are in at least kindergarten, should already have 2 doses of mumps-containing vaccine. This may not be the case, however, for campers and staff from other states and countries.

2. Campers and Staff \geq 18 years of age

The current requirement for campers and staff \geq 18 years of age and born in or after 1957 is also for 1 dose of mumps, 1 dose of rubella and 2 doses of a measles-containing vaccine, unless they have laboratory evidence of immunity (105 CMR 430.152 B). No requirement currently exists for those born before 1957. (See below for recommendations for this age group.)

All campers and staff born in or after 1957 must provide written documentation of immunizations. If documentation is not provided, the individual cannot be hired as a staff member or admitted as a camper.

Recommendations

To prevent mumps transmission in camps, MDPH recommends the following:

- **Campers and staff born in or after 1957** – Review the immunization records of individuals in this age group and recommend they have **2 doses** of MMR vaccine.
- **Staff born before 1957** – While birth before 1957 is usually considered adequate proof of immunity (because most people born before 1957 are likely to have been naturally infected), this does not guarantee immunity. In order to better protect older staff against mumps, MDPH recommends 1 dose of MMR for these individuals (unless they have laboratory evidence of immunity).
- **Health care workers** – Year of birth does **not** constitute acceptable proof of immunity. Health care workers **born before 1957** should have one dose of MMR, though two doses are now recommended (in an outbreak, two doses may be required). Health care workers **born in or after 1957** should have two doses of MMR.

Please keep in mind that many campers and staff may be from other states and countries that do not have the same immunization requirements as Massachusetts. Special vigilance is required to ensure they are up-to-date with current camp recommendations.

Reporting and Control Measures

All suspect cases of mumps must be reported to your local board of health and to the MDPH Immunization Program at **(617) 983-6800**. An MDPH epidemiologist (available 24 hours per day, 7 days per week) will assist you in the development of control measures. More detailed

guidance can be found in the mumps chapter of DPH's *Guide to Surveillance, Reporting and Control* which is located on the department's website at <http://www.mass.gov/dph>.

Initial management of students or staff with suspect mumps

Mumps is infectious for **2 days before through 5 days after onset of swelling** (day of onset is day zero).

- Students and staff should receive instructions to remain in isolation through 5 days after swelling onset.
- MDPH and/or your local board of health will work with you to identify contacts and take appropriate control measures.

Other Control Measures

- **Identify** all close contacts among students and staff exposed to the suspect case.
- **Assess** all exposed individuals for acceptable evidence of immunity, as outlined above.
- **Recommend vaccination** for all susceptible individuals
- **Exclude or isolate all susceptible contacts from camp/work.** Campers and staff who are not appropriately immunized (or do not have laboratory evidence of immunity) will need to be isolated or excluded from day 12 through day 26 after exposure to a case or suspect case of mumps (105 CMR 300.200).
- **Surveillance** for early identification of secondary cases.

Should cases of mumps be identified, 2 doses of mumps vaccine (if no previous doses, two doses administered \geq 28 days apart) will be required for all camp attendees and staff.

State-Supplied MMR Vaccine

Campers and staff should be vaccinated by their own health care providers prior to arriving at camp. State-supplied MMR vaccine is available for: 1) routine vaccination of Massachusetts children less than 19 years of age; 2) outbreak control; 3) Massachusetts college students; and 4) adults in high-risk groups seen at public provider sites, such as health department clinics and community health centers. MMR will need to be purchased for all other individuals, including for the routine immunization of campers and staff from other states and countries (except for outbreak control).

If you have any questions about the regulations, recommendations, vaccine availability or other mumps-related issues, please contact DPH's Division of Epidemiology and Immunization at (617) 983-6800.

- For the latest information about mumps and its control in Massachusetts, visit the MDPH website at: www.mass.gov/dph/imm and look on "Advisories, Alerts and Events"
- Additional information is also available at the Centers for Disease Control and Prevention (CDC) website at: www.cdc.gov/mumps
- For a copy of the regulations for recreational camps for children, visit: <http://www.mass.gov/Eeohhs2/docs/dph/regs/105cmr430.pdf>

References

ACIP. Provisional Recommendations for Measles-Mumps-Rubella (MMR) ‘Evidence of Immunity’ Requirements for Healthcare Personnel. August 28, 2009.

www.cdc.gov/vaccines/recs/provisional/default.htm

ACIP and VFC. Resolution No. 06/09-3. Vaccines to Prevent Measles, Mumps, Rubella, and Varicella. Centers for Disease Control and Prevention.

<http://www.cdc.gov/vaccines/programs/vfc/acip-vfc-resolutions.htm>

CDC. Update: Mumps Outbreak---New York and New Jersey, June 2009--January 2010. MMWR 2010; 59:125-93.

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5905a1.htm>

CDC. *Manual for the Surveillance of Vaccine-Preventable Diseases*. CDC. Atlanta, GA; 2008: 9–1–12. <http://www.cdc.gov/vaccines/pubs/surv-manual/default.htm>

CDC. Updated recommendations of the Advisory Committee on Immunization Practices (ACIP) for the control and elimination of mumps. MMWR 2006;55:1-2.

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5522a4.htm>